

DIME BRIEF

Upgrading Informal Settlements in South Africa

The Development Impact Evaluation Initiative at the World Bank supports government agencies to adopt a culture of real time, evidence-based policy-making. The objective of the initiative is to help programs learn how to improve their performance over time by both measuring results, and comparing policy alternatives side by side to determine which alternatives are more effective on the basis of rigorous impact evaluation. DIME works with 300 agencies in 72 countries to improve knowledge, quality of operations and country capacity for evidence-based policy-making.

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Over one billion people live in slums. How can we provide effective support to improve their lives? To answer this question, the South African National Department of Human Settlements (NDOHS) has been working with the Development Impact Evaluation Initiative of the World Bank to develop and implement its new program of impact evaluations. The evaluations measure the causal links between the NDOHS' Upgrading of Informal Settlements Programme (UISP) and empowerment, health and safety, employment, consumption, and productive activities and test innovative interventions within the UISP to learn how best to deliver the program to maximize results. The program addresses important policy questions:

- How to develop human settlements that promote social and economic integration;
- How to use the upgrading process to increase income-generating opportunities;
- How to plan for migration dynamics;
- What are the most important steps in the incremental upgrading process?

Evaluation Designs

RELOCATION IN LIMPOPO

In 2006 the Polokwane Municipality relocated over 1000 households from the west side of the Disteneng Informal Settlement to a formalized area 1 mile away. Qualifying households lying to the west of the main road splitting Disteneng in half were resettled into fully serviced Government housing while the households to the east of the dividing road were required to wait until



further funding and suitable land became available (see aerial view). Since households on either side of the dividing road were part of the same settlement, household characteristics *before the relocation were similar on average*. This provides the rationale for using the households in East Disteneng as a valid counterfactual (or control group).

IN-SITU UPGRADING IN THE FREE STATE

A large-scale upgrading program began in the Grasslands informal settlement in the Free State province in 2006. A phased roll-out started in Grasslands II and moved to Grasslands III in 2008. Due to coordination problems, houses were provided without standard toilet facilities in these areas. In the neighboring Bloemside V settlement, upgrading was meant to begin simultaneously with Grasslands II but, due to delays in land acquisition, only services could be provided in the area (water, sanitation and electricity) and formal housing will be provided at a later stage. This natural experiment offers the opportunity to measure the impact of (1) The relative impact of formal housing without sanitation against the provision of a full services package without formal housing by comparing Bloemside and Grasslands residents and (2) The long-term effects of formalized housing by comparing Grasslands II and Grasslands III residents.



Main Results

(1) Increases in expenditure resulting from improved housing and services are not supported by a commensurate increase in income which results in more frequent lending

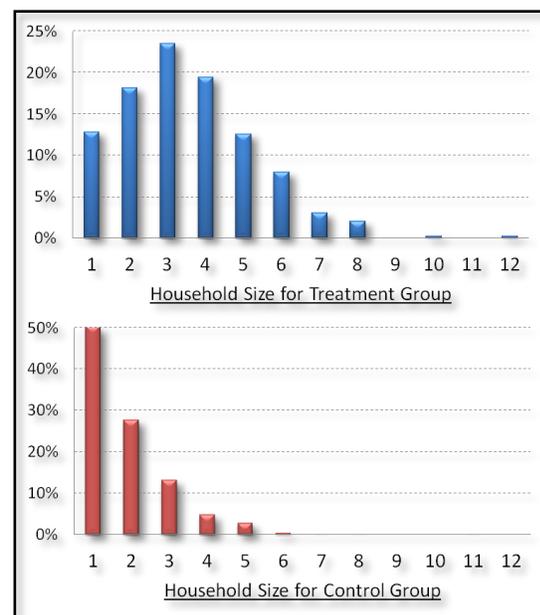
The provision of electricity increases asset accumulation considerably while expenditure on water and electricity ranges from 12% (Free State) to 18% (Limpopo) of total household expenditure for serviced households. Approximately 15% of formalized households in Limpopo and Free State spent money upgrading their homes in the previous year compared to 1% in the informal areas in Limpopo and 6% in the serviced stands of Free State. Average household income, however, remained constant at approximately \$200 per month across all groups.

(2) Although income remains constant across interventions, the source of this income differs

In Limpopo, the percentage of households with paying tenants on their property (“backyard rentals”) increased from 7% in the informal settlement to 43% in the formalized area while the average amount paid by tenants also increases from R303 (\$43) to R469 (\$67) per month as households leverage

(3) Average household size increases from 1.9 people in informal housing to 3.9 in formalized houses in Limpopo

Supporting evidence suggests that households bring family members that would normally reside elsewhere to stay with them when provided with formalized housing.

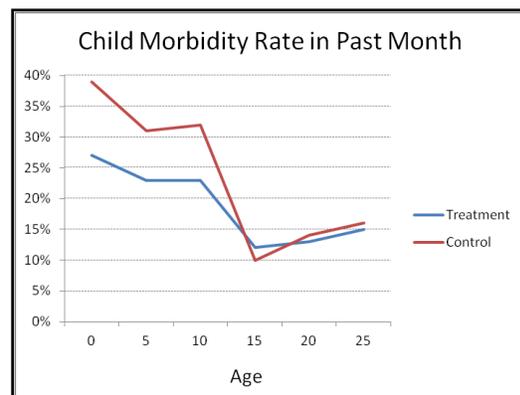


(4) Household interactions change from dependence-motivated to community-minded activities

Interactions between households change from those based on dependence (reliance on neighbors for support with finding jobs, caring for children, sharing food and medical care) to actively supporting the community (joining parent-teacher associations, neighborhood improvement groups, religious groups, sports clubs and volunteer organizations) in Limpopo when communities are upgraded. Results in the Free State are mixed, and there seems to be no evidence that either serviced stands or partially serviced houses have differing impacts on social cohesion. At least part of this behavior shift is linked to the change in household composition.

(5) Morbidity rates decrease, but only for young children

Given the substantial changes in the environment that come with upgrading a house and community, one would expect large effects on health outcomes. Results from the two studies however show little difference between groups overall, but this impact changes depending on the cohort being observed. Morbidity among shack dwellers under the age of 5 is 40%. This is significantly lower for children under 5 in formal housing (26%). However, as we compare older cohorts the morbidity rates converge.



Policy Recommendations

(1) Given the potential source of income, formalization, rather than eradication of backyard rentals should be considered

Policy on backyard rentals is fragmented and application differs from Province to Province. Understanding the true economic value of this rental market is a first step to unlocking its development potential.

(2) A financial literacy component should be included in the upgrading program

Major expenditure shifts occur at the household level during the upgrading process. The acquisition of time-saving household appliances with the introduction of electricity and expenditure on housing improvements are generally seen as positive. However, households may benefit from basic financial literacy training to ensure that, as their expenses increase, this is done in a responsible and sustainable manner, mitigating the heavy debt burden realized by Municipalities when households default on payments for services.

(3) Planning of social amenities should account for expected rather than current household sizes

Improved settlement conditions attract new residents which shift the demographics of the community when children and spouses join the household head. Aside from the social consequences of this, it is important for town planners and municipal developers to prepare modeling estimates of expected increases in the settlement population and plan for the required facilities based on these estimates.



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